

National Park Service

U.S. Department of the Interior

**Grand Teton National Park
Wyoming**



Fuels Reduction Projects

***Draft* Finding of No Significant Impact**



**DRAFT FINDING OF NO SIGNIFICANT IMPACT
FUELS REDUCTION PROJECTS
GRAND TETON NATIONAL PARK**

In response to National Fire Plan initiatives, Grand Teton National Park, Bridger-Teton National Forest, and Jackson/Teton County have repeatedly collaborated on fuels treatment projects in the Greater Jackson Hole area with large success. The Grand Teton National Park (GTNP) demonstration project is a combination of seven small fuels management projects totaling 89 acres between Moran and Moose, in mixed conifer and sage/grass fuels. The park plans to treat these 89 acres by creating shaded fuel breaks in mixed conifer fuels and increasing spacing between burnable vegetation by mowing sage fuels.

The purpose of these projects is to provide protection of structures from fire in the wildland urban interface. The EA examines two alternatives: Alternative 1 – No Prior Treatment (No Action Alternative) and Alternative 2 – Mechanical Fuels Treatment w/Pile Burning (Proposed Action). Two other alternatives were considered but rejected during internal scoping due to their infeasibility and ineffectiveness. Neither public scoping nor consultation with several other agencies indicated additional alternative uses of available resources or other significant strategies, issues or unresolved conflicts; therefore, other alternatives were not evaluated. Implementation of Alternative 2, the preferred alternative, will reduce the risk of wildland fire to structures and the environment while providing for firefighter safety and reduce risk to human life and provide protection of property. This alternative poses minor and relatively short-term effects to air quality, vegetation, and wildlife habitat, yet has the potential to moderately affect employee and public safety in a beneficial way. It poses negligible effects to Threatened & Endangered (T&E) species and cultural resources.

PREFERRED ALTERNATIVE

The preferred alternative (Alternative 2) would mechanically treat seven sites totaling 89 acres between Moran and Moose by creating shaded fuel breaks in mixed conifer fuels and increasing spacing by mowing sage fuels. The treatments will include thinning of overstory trees to a distance of 12 feet between trees or groups of trees, reducing seedling and pole size tree densities, reducing accumulations of downed logs and debris, and removing limbs within 6 feet of the ground. Treatments will include a combination of cutting and piling of live vegetation, piling of dead vegetation, pile burning, broadcast burning, and fuel break mowing according to specifications (Appendix B) developed by Grand Teton fuels management specialists. Cut materials will be piled by hand and burned on site once they dry adequately. All treatments except the mowing will be conducted by hand crews using chain and handsaws to cut the debris into manageable lengths and will be focused near structures. The seven project locations are:

- ❑ McCollister – Fuels reduction work and clean up of dead and down fuels around historic residence and outbuildings to reduce fire threat. (10 Acres)
- ❑ Fabian Ranch – Fuels reduction work and clean up of dead and down fuels around historic structures. This also will be used for historic scene maintenance. (20 Acres)
- ❑ Blacktail North – Fuels reduction work and clean up of dead and down fuels along the park boundary adjacent to private properties to reduce fire threat. (6 Acres)

- ❑ Bar B C - Fuels reduction work and clean up of dead and down fuels around historic structures. This also will be used for historic scene maintenance. (20 Acres mowing, 10 Acres chainsaw work)
- ❑ Oxbow Housing (Jackson Lake Ranger Station) - Fuels reduction work and clean up of dead and down fuels around historic residence and outbuildings to reduce fire threat. (7 Acres)
- ❑ Moran - Fuels reduction work and clean up of dead and down fuels around residences and outbuildings to reduce fire threat. This project was begun as prescribed burn preparation, but due to sage grouse concerns we are only using mechanical treatments immediately adjacent to structures. (10 Acres)
- ❑ Jackson Lake Dam - Fuels reduction work and clean up of dead and down fuels around residence and outbuildings at the Bureau of Reclamation Administrative Site to reduce fire threat. (6 Acres)

The objective is to reduce fuels accumulations in and adjacent to a number of historic structures, private residences, government offices, government housing units, and Bureau of Reclamation properties. Thinning and removal of dead and down fuels will reduce the potential intensity of fires, allowing firefighters to safely and efficiently suppress fires. Under all but the most severe fire weather conditions, fire spread will be limited to a low intensity ground fire that can be attacked by firefighters on the ground. The following mitigation measures will be implemented at all sites as part of the proposed action:

- ❑ Conduct monitoring and evaluation of new growth to assess appropriate time and technique for the next treatment in order to minimize long-term follow-up and maintenance costs.
- ❑ Provide education and outreach both internally and externally on techniques and decision criteria to inform the public about the short-term visual impacts or aesthetics to anticipate. Help educate the public to change the perception that mechanical treatment is "unnatural."
- ❑ Conduct pre-treatment inventories; monitor and treat as necessary non-native species to reduce the risk of spreading.
- ❑ Follow Special Operating Procedures (SOPs) regarding the cleaning of equipment and vehicles to reduce the spread of noxious and invasive species during operations.
- ❑ Follow standards and protocols and monitor wildlife for future prescription adjustments in order to minimize the potential effects to vegetation and wildlife by blow down, killing trees by limbing, disease, and burn piles scorching soils.
- ❑ Burn only under favorable atmospheric conditions, provide advanced notification to residents and visitors, allow fuels to cure completely to reduce smoke, sell firewood to reduce heavy fuels being burned, limit number of piles burned per day, or any combination thereof to minimize smoke impacts.
- ❑ Select specific times of the day and the week to use chainsaws and consider burning piles instead of chipping to minimize noise impacts on residents, visitors, and wildlife.
- ❑ Refine and utilize SOPs to ensure proper personnel training and supervision to reduce risk of injury to personnel during treatment operations.
- ❑ At Blacktail North, make a special effort to educate and inform private residents that additional land treatment (by them) will be required in order to fully meet the

purpose and need of this action, since treatment is not immediately adjacent to their structures.

ALTERNATIVES CONSIDERED

Two alternatives were considered: No Action - Alternative 1 and Mechanical Fuels Treatment with Pile Burning - Alternative 2, the preferred alternative, to safely reduce fuels accumulations in and adjacent to a number of historic structures, private residences, and government offices and housing units. Two other alternatives were considered but rejected due to increased risk to both personnel safety and the structures they surround and the lack of their effect on fire behavior.

The no action alternative (Alternative 1) would involve no prior treatment, primarily because the existing Hazardous Fuel Management Plan (1991) does not allow for any new actions without conducting a full environmental analysis. Fuels are primarily in Fire Regime III and Condition Class 2 at the seven project locations. Without treatment or action, fuels accumulations will continue to increase in and adjacent to a number of historic structures, private residences, government offices, government housing units and Bureau of Reclamation properties in Grand Teton National Park. Greater risk and compromised safety are inherent to the public and firefighters when suppressing fires at these sites due to the high intensity of fires that dense vegetation and a build up of dead and down fuels create.

Under all normal fire weather conditions, fire spread will not likely be limited to a low intensity ground fire that can be attacked by firefighters on the ground. Heavier fuels with higher crown potential and longer flame lengths will create torching trees, and increase the potential for a fire to develop into a crown fire. The no action alternative promotes increasingly dangerous conditions that increase risk to structures, firefighters and the public. This alternative is costly in the long term in regards to response effectiveness and loss of structures. This alternative is inconsistent with National Park Service policy. A decision to continue with the no action alternative will not adequately protect life and property and poses higher risk to fire fighters and the public. Historically it has not worked.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The Mechanical Fuels Treatment with Pile Burning alternative is the environmentally preferred alternative. The environmentally preferred alternative is determined by applying the criteria suggested in the National Environmental Policy Act of 1969 (NEPA), using guidance from the Council on Environmental Quality (CEQ) regulations. CEQ regulations provide direction that "[t]he environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101. Generally this means the alternative which causes the least damage to the biological and physical environment. It also means the alternative that best protects, preserves, and enhances historic, cultural, and natural resources." [Question 6a, "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations" (40 CFR 1500-1508), *Federal Register* Vol. 46, No. 55, 18026-18038, March 23, 1981]. The Mechanical Fuels Treatment with Pile Burning (Alternative 2) would provide maximum protection of park resources and values, human health and safety, and visitor use and enjoyment of Grand Teton National Park.

The Mechanical Fuels Treatment with Pile Burning alternative is the environmentally preferred alternative because it:

- Meets the project purpose and need and is consistent with National Park Service and National Fire Policies.
- Reduces flame lengths to less than 4 feet so firefighters can use hand tools to protect structures and it provides efficient and safe tactical access to the structures.
- Limits spotting and torching of trees, thus minimizing impacts to the structures.
- Provides a long term cost savings by preventing the loss of structures and decreasing fire response expenses.
- Maintains local plant communities as much as possible and provides for the protection of invaluable cultural resources.
- Increasing the potential to maintain healthful, productive, and esthetically and culturally pleasing surroundings for employees, visitors, and residents
- Attains the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.
- Preserves important historical, cultural, and natural aspects of our national heritage and maintains an environment that supports natural vegetative diversity.

WHY THE PREFERRED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

Impacts that may be both beneficial and adverse: The beneficial and adverse impacts of the proposed action are described in detail in Table 2 in Appendix D of the environmental assessment. Adverse impacts range from negligible to minor, direct, short-term or long-term increases in smoke; spreading of nonnative invasive species and vegetation disturbances in treatment areas; and wildlife habitat alterations in treatment areas.

Beneficial impacts range from minor to moderate and include both short-term and long-term direct and indirect benefits. Most notably, the risk of unmanageable fires that could take over historic structures and destroy them will be reduced and public and firefighter safety will be increased due to the barrier or slower burning area that the treatments will create in the event of a large wildfire. Firefighters may be able to apply more resources to other locations in the vicinity of these project areas because these areas will require minimal firefighting resources after treatment.

Degree of effect on public health or safety: Public health and safety are important considerations for this proposed action. Compliance with State of Wyoming Department of Environmental Quality air permitting requirements will ensure that public health will be protected from exposure to emissions and smoke. The treatments will provide efficient and safe tactical access to the structures and maintain a safe environment such that risk to personnel is minimized when protecting structures against fire. Long-term effects would be beneficial and range from minor to moderate because the proposed action would form of a barrier or slower burning area in the event of a large wildfire in their respective

locations. Firefighters may be able to apply more resources to other locations in the vicinity of these project areas because these areas will require minimal firefighting resources after treatment. The proposed action would temporarily expose the public to minor smoke and visibility impacts. This decrease in air quality would be a temporary, minor impact that would end as soon as the treatment activities were completed.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas: Both prehistoric and historic resources can be found in Grand Teton National Park. Although less than 10% of the lands within the park have been surveyed, the seven project sites were completely surveyed and no new sites were found. All the sites except for the Jackson Lake Dam site have historic structures and buildings listed in or eligible for listing in the National Register of Historic Places. One of the primary project goals is to mechanically treat around historic structures in order to protect them from wildfire. GTNP received a letter of concurrence from the Wyoming SHPO provided dated February 5, 2003, which determined that the proposed action would have no adverse effect on archeological resources or historic structures. No effects to other unique cultural or natural resources were identified for the proposed action. There are no prime farmlands, jurisdictional wetlands, wild and scenic rivers, or ecologically critical areas affected in the project areas.

Degree to which effects on the quality of the human environment are likely to be highly controversial: The proposed action's overall effects on the human environment would be beneficial as a result of protecting life, property, and resources from unwanted fire and preserving important historical, cultural, and natural aspects of our national heritage. None of the concerns or points raised during the environmental assessment scoping and analysis phases were identified as controversial issues.

As part of the scoping process, the National Park Service contacted potentially interested government agencies, including the Wyoming State Historic Preservation Office, the U.S. Fish and Wildlife Service, and affiliated American Indian tribes. Copies of the letters are included in the administrative record. The issues and concerns identified as a result of the scoping effort are addressed in the environmental assessment. Implementing the proposed action would be unlikely to generate any effects on the human environment that would be highly controversial.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks: As previously described, risks involved in the proposed action relate to firefighter and public safety during periods of mechanical treatments and pile burning. Standard fire management practices, worker safety measures, and traffic control measures will reduce potential adverse effects to firefighter and public safety. Such measures have been effectively applied in other instances and their effectiveness is widely accepted. Mechanical treatment operations will rely on conventional technologies that have been successfully applied in many park unit, public-, and private-sector projects throughout the nation. Therefore, there will be no highly uncertain, unique, or unknown risks associated with the proposed action.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future

consideration: The proposed action neither establishes a National Park Service precedent for future actions with significant effects nor represents a decision in principle about a future consideration.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts: As previously described, impacts of the proposed action are primarily adverse, minor and short term for air quality, vegetation and selected wildlife habitat. Beneficial impacts up to moderate levels may be realized for historic structures and firefighter and public safety. Mechanical treatment activities to 89 acres (exponentially less than 1 percent of burnable land) within the park would not have a significant cumulative impact on the resources or values of Grand Teton National Park. The negligible to minor adverse effects related to the proposed action, in conjunction with the adverse effects of any other past, present, or reasonably foreseeable future actions would not result in significant adverse or beneficial impacts.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources: Locations to be affected by treatment activities within the park by the proposed action were all surveyed as part of environmental assessment process. A Class III Cultural Resource Inventory, conducted by the Office of the Wyoming State Archeologist (OWSA), for all seven project locations determined that the proposed action would have no adverse effect on archeological resources or historic structures. A cultural clearance was recommended to the State Historic Preservation Office (SHPO) with the standard stipulation that should archeological remains be uncovered during implementation of the proposed action, the appropriate state and federal regulatory agencies be contacted immediately. As a result, GTNP received a letter of concurrence from the Wyoming SHPO provided dated February 5, 2003. The seven separate reports stipulated that no heavy equipment be used at the project sites, except at Bar B C where mowing is proposed. Furthermore, a historic trash dump (site 48TE1623) at Bar B C will be flagged and protected as requested in the report.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat: The EA did not identify any significant effect to endangered, threatened or species of special concern. The park is currently involved in final consultation with the U.S. Fish and Wildlife Service (USFWS) and expects to receive a determination of no effect on threatened or endangered species or their designated critical habitats. The USFWS recommended that mechanical treatment phase conservation measures be incorporated into the proposed project to protect possible Bald Eagle disturbance during treatment activities. These recommendations, listed in the biological assessment, will be adopted as part of the project during implementation.

Whether the action threatens a violation of Federal, state, or local environmental protection law: This action would not violate any federal, state, or local environmental protection laws.

Impairment: The National Park Service has determined that implementation of the proposed action will not constitute impairment to Grand Teton National Park's resources and values. This conclusion is based on a thorough analysis of the environmental impacts described in the Fuels Reduction Projects Environmental Assessment (July 2003), the public

comments received, relevant scientific studies, and the professional judgment of the decision-maker guided by the direction in *NPS Management Policies, 2001*. Although the project would have some adverse impacts, in all cases these adverse impacts would be the result of actions taken to preserve and restore other park resources and values. Overall, the proposed action would result in benefits to park resources and values, including opportunities for their enjoyment. It would not result in their impairment or in violation of the National Park Service Organic Act.

PUBLIC INVOLVEMENT

A public scoping workshop was conducted on April 24, 2003 in Jackson Hole, Wyoming, to identify potential project-related issues. Representatives from National Park Service (NPS), U.S. Forest Service, and Jackson/Teton County were present to answer questions and solicit comments on the project. A total of 13 individuals attended the workshop. One written comment was received during the public workshop and two comments were received by mail. In general, several verbal comments were received in support of reducing fuels in these seven project areas, in addition to other areas to be considered in the future.

CONCLUSION

The proposed action does not constitute an action that normally requires preparation of an environmental impact statement (EIS). Based in the environmental assessment, the proposed action will not have a significant effect on the human environment. Negative environmental impacts that could occur are minor and temporary in effect. There are no unmitigated adverse impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental protection law.